



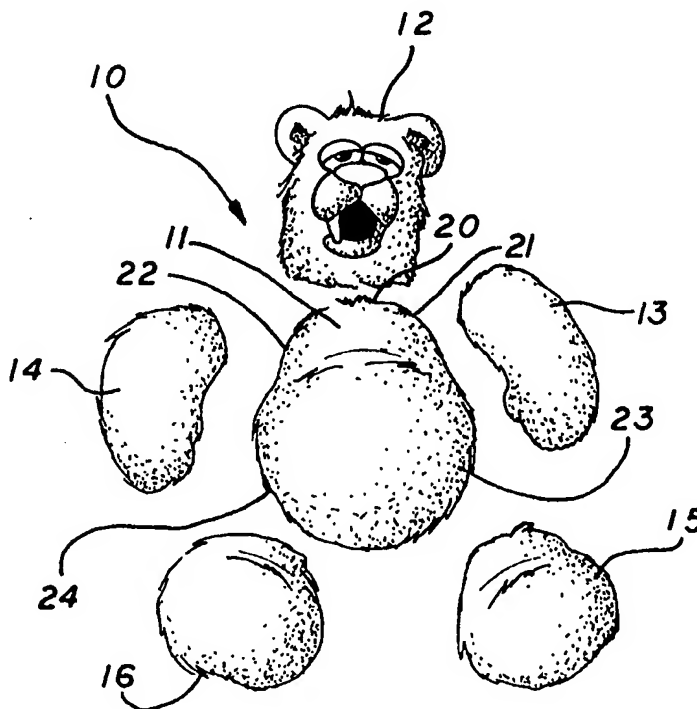
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(21) International Application Number: PCT/US99/24360 (22) International Filing Date: 18 October 1999 (18.10.99) (30) Priority Data: 60/104,880 19 October 1998 (19.10.98) US 09/419,255 15 October 1999 (15.10.99) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US Not furnished (CON) Filed on 15 October 1999 (15.10.99) (71) Applicant (for all designated States except US): GOLDEN KIDS TOYS & ENTERTAINMENT INC. [US/US]; 1089 Aviation Boulevard, Hermosa Beach, CA 90254 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): BERGER, Howard, H. [US/US]; 36 Thirteenth Court, Hermosa Beach, CA 90254 (US). (74) Agents: BERLINER, Brian, M. et al.; O'Melveny & Myers LLP, 400 South Hope Street, Los Angeles, CA 90071-2899 (US).			(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report.

(54) Title: INTERCHANGEABLE AND INTERACTIVE PLAY FIGURES

(57) Abstract

An interchangeable stuffed toy (10) is provided in the form of a character, such as an animal, in which the head and other appendages can be removed and replaced with parts from another character to thereby create new and imaginative types of characters. The stuffed toy (10) comprises a torso (11) having an outer cloth casing that is closed to form an internal cavity filled with a stuffing material. The torso (11) further comprising plural attachment points (21, 22, 23, 24) disposed on the outer cloth casing. A head (12) and plural appendages are adapted to be removably attached to corresponding ones of the attachment points. The torso (11) relates to a selected one of a plurality of characters, and the head (12) and the plural appendages respectively relate to the same or another selected one of the plurality of characters. The torso (11) may be provided with plural attachment points (21, 22, 23, 24) that permit removable attachment of the appendages to the torso (11). The attachment points may be uniformly arranged on the torsos of each of the play figures, thereby permitting a new arrangement of head (12) and appendages on a torso (11) to give the appearance of a permanent play figure. The plurality of characters may include bears, eagles, turtles, dinosaurs, penguins, ducks, tigers, dogs, frogs, monkeys, and deer, to name just a few. The stuffed toy may be provided with interactive features to emit audio signals in response to the head and/or appendages selected by the child.



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INTERCHANGEABLE AND INTERACTIVE PLAY FIGURES

CROSS-REFERENCE TO RELATED APPLICATION

This application claims the benefit pursuant to 35 U.S.C. § 119 of U.S. Provisional Application No. 60/104,880, filed October 19, 1998, which application is specifically incorporated by reference herein in its entirety.

5

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to toy play figures for children, such as stuffed animals, and more particularly, to a series of play figures having detachable body parts that may be interchangeably attached to torsos to
10 create imaginary play characters.

2. Description of Related Art

Children have long been attracted to stuffed soft and cuddly toys, particularly animal figures. One of the most popular toys of this kind is the famous Teddy bear, which generally comprises a small, stuffed bear doll
15 having a soft cloth covering. Despite the prevalence of electronic or mechanical toys and devices, the more traditional stuffed animals seem to endure as a preferred plaything for many young children. More recently, a great variety of other types of small stuffed animal toys having soft coverings have grown in popularity, with these toys referred to generally in the art as
20 "plush" toys. Stuffed animal toys are generally made of a soft inner material or stuffing, such as foam, which is held within an exterior fabric shell that simulates the feel of animal fur. The outer fabric shell may be constructed to resemble the shape of an animal, such as a bear, having a torso, legs, tail and a head.

25 It is well recognized that the use of imagination is important to a child's development. Children often enjoy interacting with three-dimensional figures of appropriate size for the child in a form of imaginary play. One type of toy available on the market offers a way for children to express their imagination

by providing a degree of interchangeability of the appearance of the toy by the selection and assembly of parts. Perhaps the most popular such toy is the classic Mr. Potato Head® toy which is the subject of U.S. Design Patent No. D280,754. The Mr. Potato Head® toy allows the child to change the visual appearance of a potato-shaped head by the addition of limbs or facial details. As popular as Mr. Potato Head® has been on the market, however, it did not have the soft, cuddly feeling of traditional stuffed animals.

The recent advent of computer technology has brought about the development of interactive toys and games that can change as a result of actions taken by the child in the process of play. Such interactive toys and games may include embedded electronic sensors that can detect specific actions taken by the child, thereby causing a particular operation to occur in response to the child's actions. An example of an interactive game is provided by U.S. Patent No. 5,890,717. Interactive features can add a degree of randomness to the operation of a toy or game in order to improve the degree of enjoyment, duration of use, and/or educational stimulation that a child can get from the toy or game. Nevertheless, such interactive features have not been heretofore adopted for use in stuffed toys.

Accordingly, it would be desirable to provide a three-dimensional toy figure that has the soft, cuddly attributes of stuffed toys, while also offering the imagination inspiring aspects of interchangeable types of toys. It would be further desirable to provide a three-dimensional toy figure having the aforementioned attributes, while further having interactive functionality to increase the entertainment and educational characteristics of the toy.

SUMMARY OF THE INVENTION

In accordance with the teachings of the present invention, an interchangeable stuffed toy is provided in the form of a character, such as an animal, in which the head and other appendages can be removed and replaced with parts from another character to thereby created new and imaginative types of characters.

An embodiment of the invention comprises a torso having an outer cloth casing that is closed to form an internal cavity filled with a stuffing material. The torso further comprising plural attachment points disposed on the outer cloth casing. A head and plural appendages are adapted to be
5 removably attached to corresponding ones of the attachment points. The torso relates to a selected one of a plurality of characters, and the head and the plural appendages respectively relate to the same or another selected one of the plurality of characters. The torso may be provided with plural attachment points that permit removable attachment of the appendages to the
10 torso. The attachment points may be uniformly arranged on the torsos of each of the play figures, thereby permitting a new arrangement of head and appendages on a torso to give the appearance of a permanent play figure. The plurality of characters may include bears, eagles, turtles, dinosaurs, penguins, ducks, tigers, dogs, frogs, monkeys, deer, fish, insects, and
15 reptiles, to name just a few.

In another embodiment of the invention, the interchangeable stuffed toy further comprises an internal control device having a speaker coupled thereto that provides certain interactive functionality. The control device is adapted to cause the speaker to emit at least one of a plurality of audible signals
20 responsive to an external stimulation provided by the child. Each of the plural appendages and head may be provided with respective unique markers. The control device further comprises a sensor adapted to detect each one of the unique markers. The control device thereby selects an audible signals to be emitted by the speaker in correspondence with a respective one of the unique
25 markers. The sensor may provide a radio frequency (RF) signal that is radiated in a limited area closely adjacent to the torso, and the unique markers each provide a unique responsive signal in return.

A more complete understanding of the interchangeable and interactive play figures will be afforded to those skilled in the art, as well as a realization
30 of additional advantages and objects thereof, by a consideration of the

following detailed description of the preferred embodiment. Reference will be made to the appended sheets of drawings that will first be described briefly.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a front view of an interchangeable play figure in the form of a
5 bear;

Fig. 2 is a rear view of the bear play figure of Fig. 1;

Fig. 3 is a side view of the bear play figure of Fig. 1;

Fig. 4 is a front view of the bear play figure of Fig. 1 with disassembled
limbs and torso;

10 Fig. 5 is a front view of an interchangeable play figure in the form of a
turtle;

Fig. 6 is a rear view of the turtle play figure of Fig. 5;

Fig. 7 is a side view of the turtle play figure of Fig. 5;

Fig. 8 is a front view of the turtle play figure of Fig. 5 with disassembled
15 limbs and torso;

Fig. 9 is a front view of an interchangeable play figure in the form of a
penguin;

Fig. 10 is a rear view of the penguin play figure of Fig. 9;

Fig. 11 is a side view of the penguin play figure of Fig. 9;

20 Fig. 12 is a front view of the penguin play figure of Fig. 9 with
disassembled limbs and torso;

Fig. 13 is a partial side sectional view of a wing of the penguin play
figure of Fig. 9 showing the exemplary hook and pile attachment;

Fig. 14 is a partial end view of a torso attachment point for an
25 interchangeable play figure limb;

Figs. 15-20 illustrate imaginary characters formed from torso, head and
limbs of assorted ones of the interchangeable play figures;

Fig. 21 is a cutaway view of a play figure torso showing internal control
circuitry in accordance with an interactive embodiment of the invention;

Fig. 22 is a partial cutaway view of a torso attachment point showing an internal sensor detected by the control circuitry;

Fig. 23 is a block diagram of the internal control circuitry; and

Fig. 24 is a flow chart illustrating operation of the control circuitry.

5 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention satisfies the need for a three-dimensional toy figure that has the soft, cuddly attributes of traditional stuffed animals, while also offering the imagination inspiring aspects of interchangeable types of toys. In the detailed description that follows, like element numerals are used
10 to describe like elements illustrated in one or more of the figures.

Referring first to Figs. 1-4, a first embodiment of a play figure 10 is illustrated. The play figure 10 depicts a fanciful bear, and has an outer surface that is soft and cuddly to simulate a bear's fur coat. The bear play figure 10 has a torso 11, a head 12, hind legs 15, 16, and forearms 13, 14.
15 The forearms 13, 14 are folded across the bear's chest as the play figure sits on the hind legs 15, 16 and torso 11. As known in the art of stuffed toys, the torso 11, head 12, legs 15, 16, and forearms 13, 14 of the bear play figure 10 may each be formed of a cloth material that is closed to define an interior space that is filled with a stuffing material.

As shown in Figs. 1-3, the bear play figure 10 appears as a single piece. Referring to Fig. 4, however, the bear play figure 10 is disassembled to reveal that the torso 11, a head 12, forearms 13, 14, and legs 15 and 16 are actually separate pieces. The torso 11 is provided with has five attachment points 20-24 for to permit attachment of the disassembled parts, as will be
20 described in greater detail below. More particularly, the head 12 may be attached to attachment point 20, the forearms 13, 14 may be attached to respective attachment points 21, 22, and legs 15, 16 may be attached to respective attachment points 23, 24. The bear play figure 10 has little or no observable or actual neck region. This allows firm and solid connection
25 between the torso 11 and the head 12 for normal play without risk of the head
30

or other part becoming dislodged unintentionally. It should be appreciated that the rotational orientation of the head 12, forearms 13, 14, and/or legs 15, 16 relative to the torso 11 may be readily changed as desired.

Figs. 5-8 illustrate a second embodiment of a play figure 30. The play figure 30 depicts a turtle that is sitting upright on hind legs. Like the bear play figure 10, the turtle play figure 30 is comprised of an outer covering that is soft and cuddly. The turtle play figure 30 has a torso 31 having a shell, a head 32, hind legs 35, 36, and fore legs 33, 34. The fore legs 33, 34 extend outwardly from the torso 31. The torso 31, head 32, hind legs 35, 36, and fore legs 33, 34 of the turtle play figure 30 may each be formed of a cloth material that is closed to define an interior space that is filled with a stuffing material. Fig. 8 illustrates the turtle play figure 30 disassembled to reveal that the head 32, fore legs 33, 34, and hind legs 35, 36 are separate pieces that attach to the torso 31 at respective attachment points in the same manner as the bear play figure 10 described above.

Figs. 9-12 illustrate a third embodiment of a play figure 40. The play figure 40 depicts a penguin that is sitting upright on hind legs. Like the bear play figure 10 and turtle play figure 30, the penguin play figure 40 is comprised of an outer covering that is soft and cuddly. The penguin play figure 40 has a torso 41, a head 42, hind legs 45, 46, and flippers 43, 44. The torso 41, head 42, hind legs 45, 46, and flippers 43, 44 of the penguin play figure 40 may each be formed of a cloth material that is closed to define an interior space that is filled with a stuffing material. Fig. 12 illustrates the penguin play figure 40 disassembled to reveal that the head 42, flippers 43, 44, and hind legs 45, 46 are separate pieces that attach to the torso 41 at respective attachment points in the same manner as the bear play figure 10 and turtle play figure 30 described above.

In a preferred embodiment of the invention, the attachment points are provided with conventional hook and pile fasteners, e.g., VELCRO®, but it should be appreciated that other conventional fastening devices can also be

utilized, such as snaps, buttons, and the like. More particularly, Fig. 13 illustrates the flipper 44 of the penguin play figure 40 attached to a corresponding torso 11, 31, or 41 using respective hook and pile fastener parts 51, 52. The hook part 51 is sewn to the outer surface covering of the torso 11, 31, or 41 and is in the form of a flexible disk having upstanding hooks. The disk has a generally circular shape with an exemplary diameter of approximately one inch. The pile part 52 is sewn to the flipper 44 at a side surface thereof. The disk of the hook part 51 is sewn within a circular rib 54 of the torso cover material to slightly depress the hook material below the level of attachment of the pile part 52. Fig. 14 shows a typical attachment point 21 corresponding to the position of one of the fore legs or flippers. The fabric rib 54 is visible surrounding the hook part 51 in Fig. 14. Ideally, the hook part 51 is slightly recessed below the surface of the torso 11, 31, or 41 so that the appendages when attached appear as though they are permanently attached without any of the hook and pile fastener showing. This also has the salutary effect of protecting the child from possible scratches from the fastener material, if contacted during play.

Fig. 13 further shows the exterior covering of the torso 11, 31 or 41 comprising a fur-like material to simulate bear fur or a velour material for the other figures (i.e., turtle and penguin) which has sufficient depth of fabric to generally cover the attachment details to provide a more natural appearance. The torso 11, 31, or 41 is filled with a stuffing material 56. Similarly, the flipper 44 is filled with a stuffing material 58. It should be appreciated that each of the foregoing described heads and appendages of the play figures would be similarly constructed and would attach to the torsos in a like manner.

As will be further described below, each of the foregoing play figures 10, 30, 40 has parts that are completely interchangeable with each other. For example, the bear head 12 may be attached to any one of the bear torso 11, the turtle torso 31, or the penguin torso 41. Likewise, the hind legs, fore legs or flippers can be interchangeably attached to any of the connection points of

any of the torsos 11, 31, 41. This aspect of the invention is illustrated in Figs. 15-20 in which a series of figures, all having the same general size with similarly located same attachment points. The appendages of any one play figure may be removed from the corresponding torso by separating the hook and pile parts 51, 52, and different appendages may thereafter be attached thereto to create an imaginary character. Such an imaginary character may exhibit physical characteristics of each of the other characters. A child can replace the appendages in a matter of seconds and the figure becomes a unique character, which is limited only by the imagination of the child and the number of original figures in the series that are available to the child. The series may be expanded and the number of combinations expands exponentially. Examples of the various characters that are particularly suitable for adaptation to this invention, include: bears, turtles, penguins, ducks, deer, dinosaurs, tigers, pigs, eagles, dogs, frogs, insects, reptiles and fish, to name just a few. In addition, various types of humanoid characters could also be utilized, such as soldiers, knights, firemen, astronauts, robots, etc. It is anticipated that the torsos and rear legs be configured to allow the assembled character to sit or stand upright for easy viewing and shelf placement, if the child or parent desires.

Figs. 15-20 illustrate several combinations of characters, which may be assembled from the three play figures of Figs. 1-12. In Fig. 15, a bear head 12 has been attached to a turtle torso 31 with penguin flippers 43, 44 and bear feet 15, 16. Fig. 16 shows a bear head 12 on a penguin torso 41 with bear forearms 13, 14 and standing on turtle legs 35, 36. Fig. 17 provides a totally different appearance by the substitution of a penguin head 42 on the turtle torso 31 with turtle front legs 33, 34 and penguin feet 45, 46. Likewise, in Fig. 18, the turtle head 32 added to the penguin torso 41, penguin feet 45, 46 with turtle front legs 33, 34 produces a new member of the imaginary animal kingdom. In Fig. 19, a turtle head 32 and turtle front legs 33, 34 are added to a bear torso 11 and rear legs 15, 16. In Fig. 20, the bear torso 11 is

again used with the turtle head 32 and rear legs 35, 36 with penguin flippers 43, 44.

These are totally new imaginative characters that may be named by a child as desired, inspiring the child to imagine a whole animal environment and activities around such newly created imaginary animal characters. The attachment areas are all concealed so that the assembled figure appears permanent, but as indicated above, may be rapidly reassembled into another imaginary character. By using other animal characters with prominent tails and heads, such as dinosaurs, even more dramatic and imaginative play figures can be created. Coupled with the flexibility of appearance of each figure is the fact that the child is also encouraged to name his own creature. As an example, if he mixes a tiger, a frog, and a dinosaur and one can guess that he could very easily say that he has produced a "tigafrogassaurous". If he combined a pig with a dog he might decide that he has a "pog". Therefore, the child can exhibit language creativity, as well as imagination and artistic creativity in his separation and re-assembly effort.

The series of play figures can also be utilized in an instructional mode in which the normal or natural characteristics of each character can be taught and the necessary adaptations to the character can then be produced by the child's imagination and reasoning. For example, if a child combines penguin parts with a bear torso, he needs to determine where the character would live, in the woods or in Antarctica. In the event that he or she combines a turtle with a tiger, the child may have to determine whether this new character will be at home on the grassy plains of Africa or partly underwater. As another part of the educational aspects of this invention, the child may write essays about the new character, its habits and its habitat.

In an alternative embodiment of the invention, the interchangeable play figures described above can be provided with interactive features. Referring now to Fig. 21, an exemplary torso 11 is partially cutaway to reveal internal electronic enhancements. The torso 11 includes within its interior an

electronic package 130 including sensor signal analysis circuitry, memory, logic and sound generation devices. The electronic package 130 coupled to a battery pack 131, a sound generator or loudspeaker 132, and plural sensors 133a-133e. The battery pack 131 provides electrical power to the electronic
5 package 130, and may be accessible through an opening in the outer surface of the torso 11 to replace the batteries. The loudspeaker 132 permits sounds to be generated under the control of the electronic package 130, and may be disposed close to the outer surface of the torso 11 so as to not be muffled by the stuffing material. The sensors 133a-133e are disposed adjacent to
10 respective ones of the attachment areas, including a sensor 133a in the head attachment region, sensors 133b, 133c located directly below the fore leg attachment regions, and sensors 133d, 133e located below the hind leg attachment areas. An additional sensor 133f may be optionally disposed beneath the tail attachment area. The filling material 56 of the torso 11 fills
15 the space within the torso around the electronic circuitry 130, the battery pack 131 and the loudspeaker 132, and protects these components from damage during normal play.

An exemplary appendage, such as a penguin flipper 43, is shown in Fig. 22. The pile part 52 of the attachment point is partially cutaway to reveal
20 a marker device 140 disposed below the attachment. The marker device 140 is adapted to have a unique signature that can be detected by one of the sensors 133. In an embodiment of the invention, each marker device 140 comprises a passive radio frequency responsive device having a unique frequency signature. More specifically, the marker device 140 comprises a
25 conductive material formed in a particular pattern so that it oscillates at a particular frequency when energized by an electromagnetic field emitted by the sensors 133. Each appendage of each character contains a marker device tuned to a different frequency to which it responds or is detectable by a sensor 133 and the electronic circuitry 130 of Fig. 21. An example of an
30 interactive toy using such sensors and markers is provided by U.S. Patent No.

5,890,717, which is incorporated by reference herein in its entirety. Alternatively, other types of sensors and markers could be advantageously utilized, such as active radio frequency identification (RFID) tags, electronic area surveillance (EAS) tags, and the like.

5 The electronic circuitry 130 may be energized by an intentional action of a child, such as by manually operating a switch on the exterior surface of the torso 11, or by an unintentional action such as automatically detecting movement of the torso. Upon being energized, the electronic circuitry 130 scans each of the sensors 133 to detect the presence of markers indicating
10 attachment of any appendages thereto. The electronic circuitry 130 then identifies the markers by reference to a look-up table in memory that relates the frequency signature of each marker to a corresponding appendage, such as a penguin flipper 43. The electronic circuitry 130 then selects from the memory an appropriate message or melody from the stored information and
15 energizes the loudspeaker so that the character appears to be talking or issuing music. For example, if a penguin flipper 43 has been attached to a bear torso 11, the electronic circuitry may select an appropriate message, such as "these flippers help me swim!"

 An embodiment of the electronic circuitry 30 is illustrated in greater
20 detail with respect to Fig. 23. An electronic circuit 200 comprises a microprocessor (μ p) 210, a random access memory (RAM) 212, a read only memory (ROM) 214, a sensor scan device 216, and an audio control device 218. The electronic circuit 200 may be provided on an application specific integrated circuit (ASIC), as is generally known in the art. A bus 204 permits
25 communication of signals between the microprocessor 210, RAM 212, ROM 214, sensor scan device 216, and audio control device 218. The RAM 212 temporarily stores data values that are used by the microprocessor 210. The ROM 214 provides non-volatile storage of data and program information. The sensor scan device 216 is coupled to a plurality of sensors 233a-233e
30 (corresponding to the sensors 133a-133e of Fig. 21). The audio control

device 218 converts digital signals provided by the microprocessor 210 into analog signals that are communicated to a speaker 232 (corresponding to the speaker 132 of Fig. 21).

Operation of the interactive play figure is controlled by the microprocessor 210 executing a program stored in the ROM 214. An example of an interactive program is provided in Fig. 24. The program begins at step 300 in which power to the interactive play figure is provided, such as by turning on a power switch (not shown) on the outer surface of the torso. The program performs an initialization sequence at step 302 in response to some stimulus provided by the child playing with the interactive play figure, such as by pushing a button or moving the play figure in a particular manner. This causes the sensors 233 to be scanned by the sensor scan device 216 at step 304. The sensor scan device 216 makes a determination whether any markers are present at any of the sensors 233a-233e at step 306, and reports that information to the microprocessor 210. If a marker is detected, then the program proceeds to step 308 wherein the appendages corresponding to the detected markers are identified. Conversely, if no markers are detected, the program returns to step 302 to await another initialization. Once a marker has been identified, the microprocessor 210 retrieves an appropriate audio file from the ROM 214 at step 310. Then, the selected audio file is provided to the audio control device 218 at step 312, which drives the loudspeaker 232 to reproduce the file as an audio signal. Thereafter, at step 314, the program returns to the beginning to await another initialization.

The ROM 214 may include a look-up table that correlates the markers to one or more audio files. For example, attachment of an eagle head to a torso 11 may cause an audio file to be retrieved that comprises an eagle call. Alternatively, the audio file may contain a voice identifying spelling the letters of the character's name (such as B-E-A-R). It is anticipated that there be plural audio files associated with each marker, so that the same audio file is not repeated. The microprocessor 210 may keep track of the frequency of

use of each audio file to make sure that the same audio files are not repeatedly selected. By varying the audio files that are selected, the interactive nature of the play figure is improved and the child would be less likely to become bored with the toy. Moreover, the RAM 212 may maintain a configuration file of all the appendages that have been attached to the torso, and the play figure may be adapted to reproduce increasingly complex audio responses as the number of attached appendages increases.

In another alternative embodiment of the invention, it may be possible to update the data stored in the ROM 214 in order to provide additional or different audio files. For example, the torso 11 may be adapted to receive updates in the form of data cartridges that increase or alter the data files and/or programming of the play figure. For example, when a new type of character is introduced into the series, an update cartridge may be provided that adds audio files corresponding to the new character. It may also be possible to encode the corresponding audio files into the markers, so that the audio file data is transferred from an appendage to the microprocessor 210 when the appendage is attached to the torso.

Having thus described a preferred embodiment of an interchangeable and interactive play figure, it should be apparent to those skilled in the art that certain advantages of the foregoing invention have been achieved. It should also be appreciated that various modifications, adaptations, and alternative embodiments thereof may be made within the scope and spirit of the present invention. The invention is further defined by the following claims.

CLAIMSWhat is Claimed is:

1. An interchangeable stuffed toy, comprising:
a torso comprising an outer cloth casing closed to form an
5 internal cavity filled with a stuffing material, the torso further comprising plural
attachment points disposed on said outer cloth casing thereof;
a head and plural appendages adapted to be removably
attached to corresponding ones of said attachment points;
wherein said torso relates to a selected one of a plurality of
10 characters, and said head and said plural appendages respectively relate to
the same or another selected one of said plurality of characters.
2. The interchangeable stuffed toy of Claim 1, further comprising
means for removably attaching said head and said plural appendages to said
torso.
- 15 3. The interchangeable stuffed toy of Claim 2, wherein said
attaching means further comprises a hook and pile attachment.
4. The interchangeable stuffed toy of Claim 1, wherein said
plurality of characters are selected from a group including bears, eagles,
turtles, dinosaurs, penguins, ducks, tigers, dogs, frogs, monkeys, deer,
20 insects, reptiles and fish.
5. The interchangeable stuffed toy of Claim 1, wherein one of said
plural appendages further comprises a tail.
6. The interchangeable stuffed toy of Claim 1, wherein said plural
appendages further comprise wings.
- 25 7. The interchangeable stuffed toy of Claim 1, wherein said outer
cloth casing has a texture that simulates animal fur.

8. The interchangeable stuffed toy of Claim 1, wherein said torso further comprises an internal control device having a speaker coupled thereto, said control device being adapted to cause said speaker to emit at least one of a plurality of audible signals responsive to an external stimulation.

5 9. The interchangeable stuffed toy of Claim 8, wherein said plural appendages and said head further comprise respective unique markers, and said control device further comprises a sensor adapted to detect each one of said unique markers, whereby said at least one of said plurality of audible signals emitted by said speaker is selected by said control device in
10 correspondence with a respective one of said unique markers.

10. The interchangeable stuffed toy of Claim 9, wherein said control device further comprises a processor having a memory containing stored instructions to be executed by said processor, said stored instructions causing said processor to identify ones of said appendages and/or said head attached
15 to said torso and select a corresponding appropriate one of said plurality of audible signals.

11. The interchangeable stuffed toy of Claim 9, wherein said sensor provides a radio frequency (RF) signal that is radiated in a limited area closely adjacent to said torso, and said unique markers each provide a unique
20 responsive signal in return.

12. A interchangeable stuffed toy play set, comprising:
a plurality of figures with each one of said plurality of figures depicting a unique character, each one of said plurality of figures comprising a torso, a head and plural appendages, said torso being provided by an outer cloth casing closed to form an internal cavity filled with a stuffing material, said
5 cloth casing closed to form an internal cavity filled with a stuffing material, said torso further comprising plural attachment points disposed on said outer cloth casing thereof, said plural appendages and said head are adapted to be removably attached to corresponding ones of said attachment points; and
wherein, said head and/or said appendages of any one of said
10 plurality of figures are adapted to be interchangeably arranged with said torso of any other one of said plurality of figures to create an imaginary animal character having physical attributes of plural ones of said plurality of figures.

13. The interchangeable stuffed toy play set of Claim 12, wherein each one of said plurality of figures further comprises means for removably
15 attaching said head and/or said appendages to said torso.

14. The interchangeable stuffed toy play set of Claim 13, wherein said attaching means further comprises a hook and pile attachment.

15. The interchangeable stuffed toy play set of Claim 12, wherein each said unique character of said plurality of figures is selected from a group
20 including bears, eagles, turtles, dinosaurs, penguins, ducks, tigers, dogs, frogs, monkeys, deer, insects, reptiles and fish.

16. The interchangeable stuffed toy play set of Claim 12, wherein one of said plural appendages further comprises a tail.

17. The interchangeable stuffed toy play set of Claim 12, wherein
25 said plural appendages further comprise wings.

18. The interchangeable stuffed toy play set of Claim 12, wherein said outer cloth casing has a texture that simulates animal fur.

19. The interchangeable stuffed toy play set of Claim 12, wherein said torso further comprises an internal control device having a speaker coupled thereto, said control device being adapted to cause said speaker to emit at least one of a plurality of audible signals responsive to an external stimulation.

20. The interchangeable stuffed toy play set of Claim 19, wherein said plural appendages and said head further comprise respective unique markers; and said control device further comprises a sensor adapted to detect each one of said unique markers, whereby said at least one of said plurality of audible signals emitted by said speaker is selected by said control device in correspondence with a respective one of said unique markers.

21. The interchangeable stuffed toy play set of Claim 20, wherein said control device further comprises a processor having a memory containing stored instructions to be executed by said processor, said stored instructions causing said processor to identify ones of said appendages and/or said head attached to said torso and select a corresponding appropriate one of said plurality of audible signals.

22. The interchangeable stuffed toy play set of Claim 20, wherein said sensor provides a radio frequency (RF) signal that is radiated in a limited area closely adjacent to said torso, and said unique markers each provide a unique responsive signal in return.

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FIG. 1

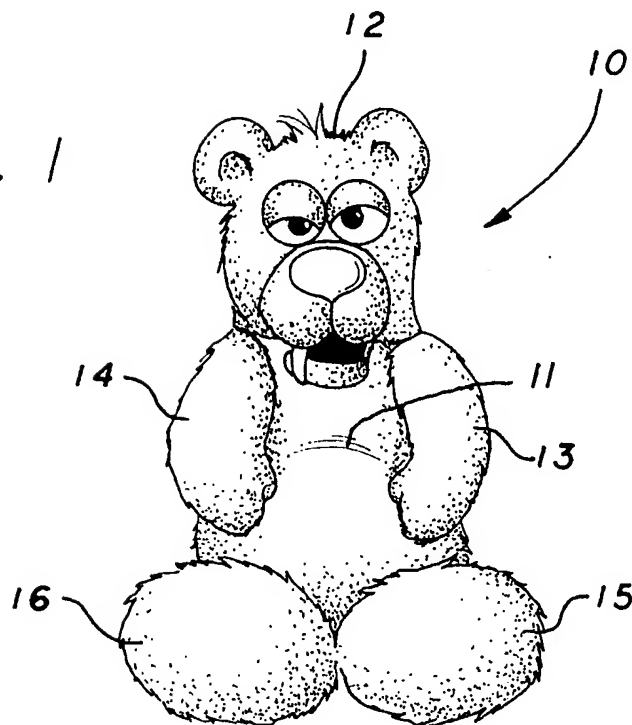
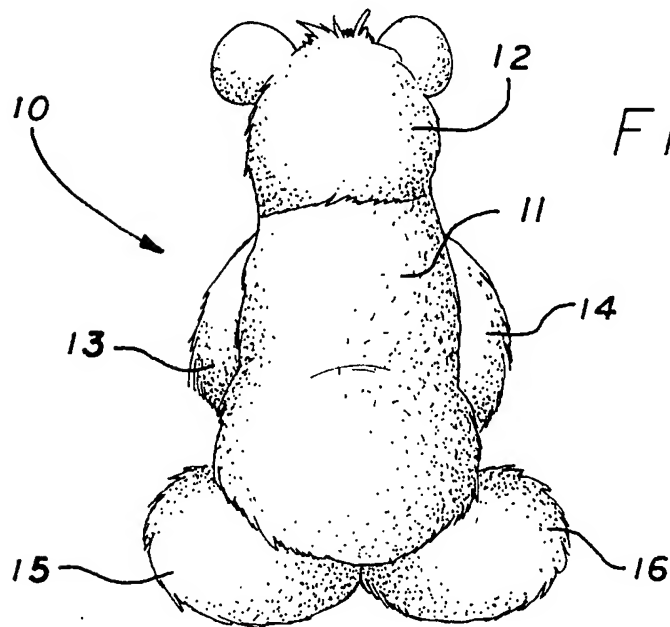


FIG. 2



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FIG. 3

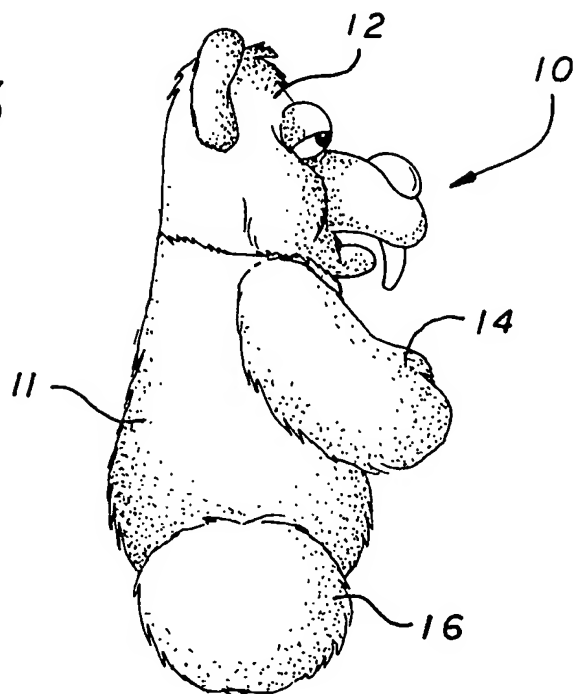
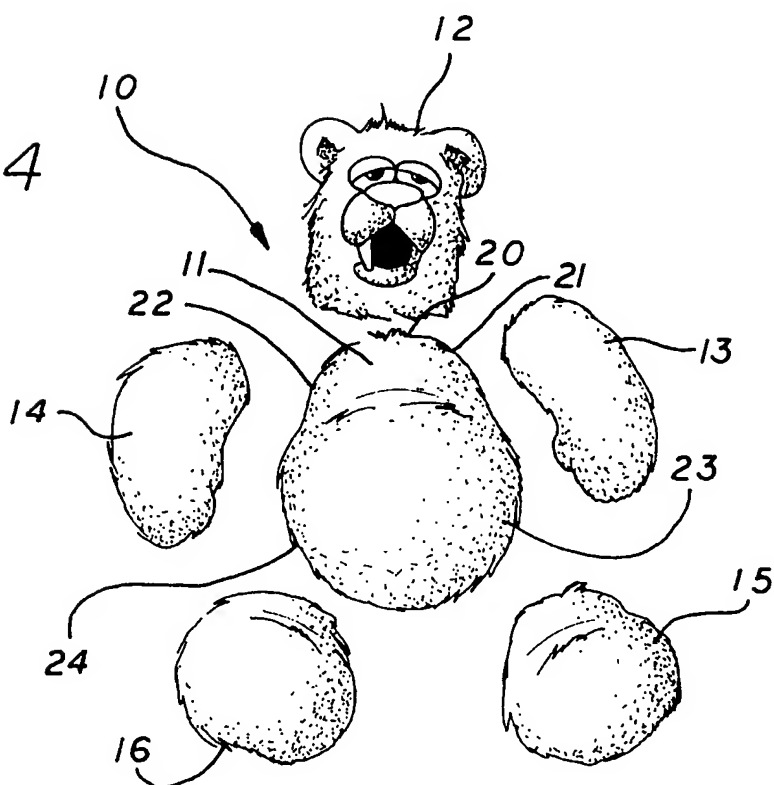


FIG. 4



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FIG. 5

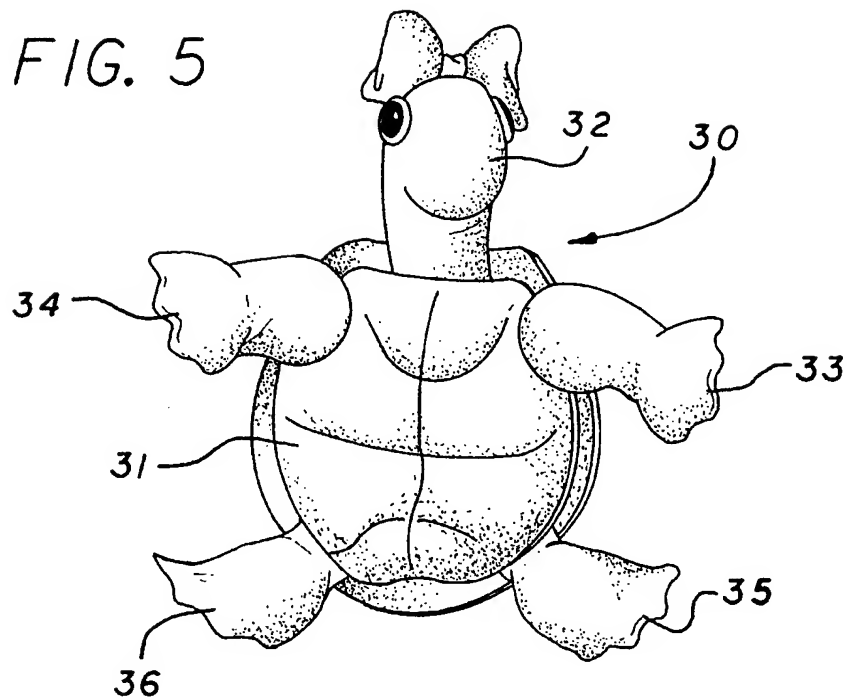
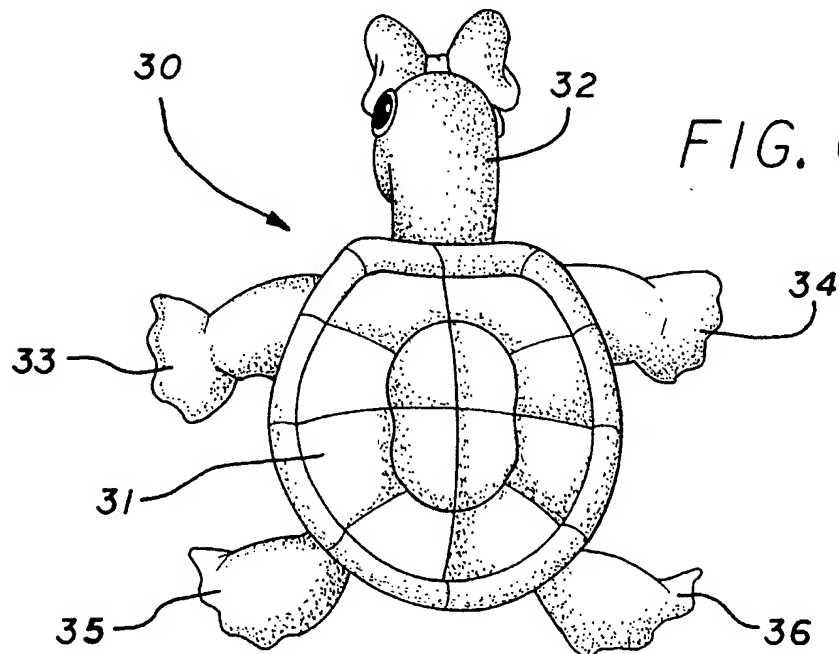


FIG. 6



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FIG. 7

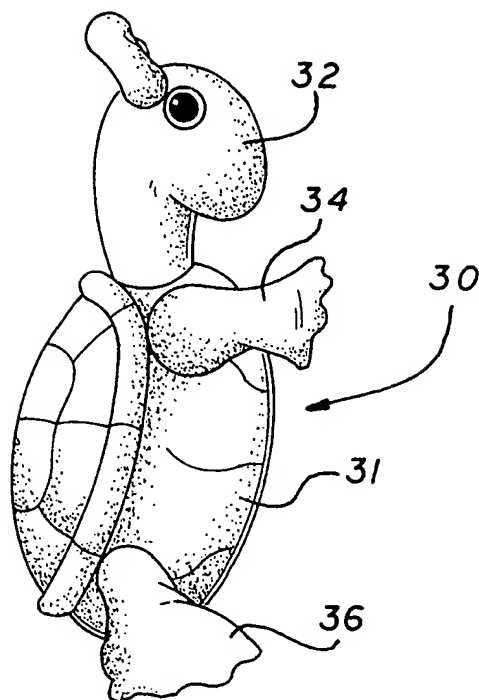
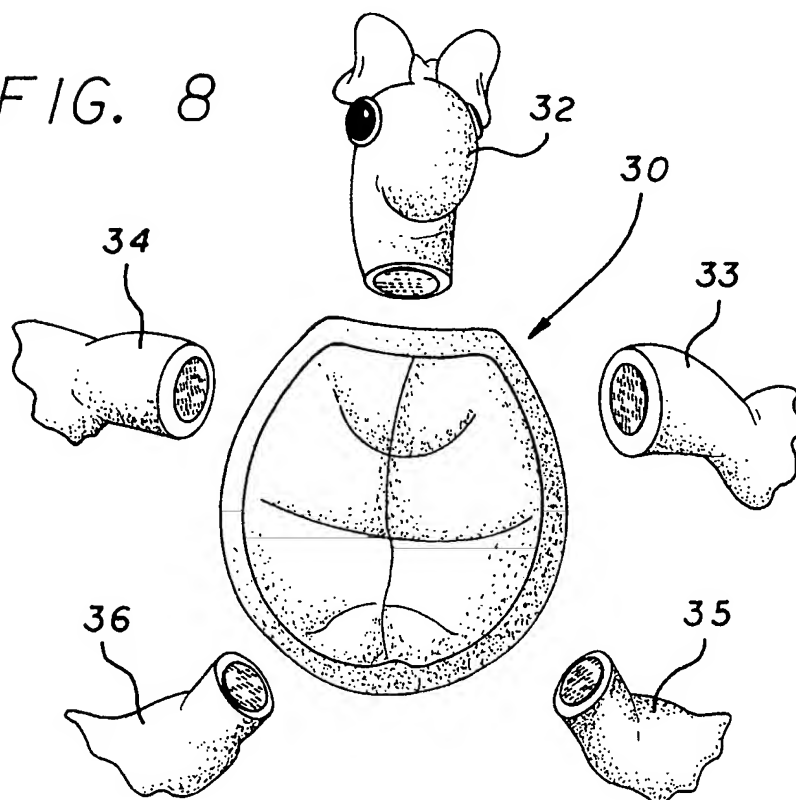


FIG. 8



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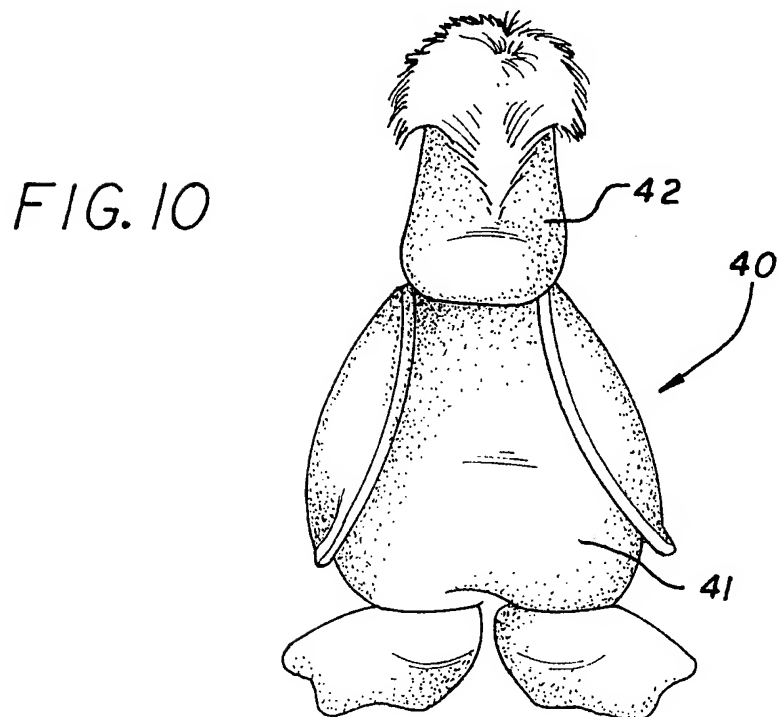
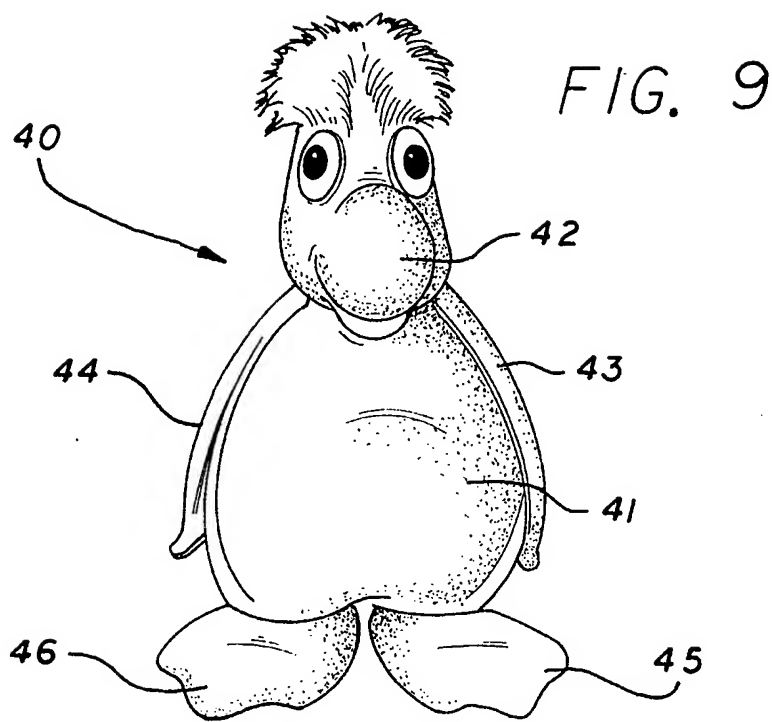


FIG. 11

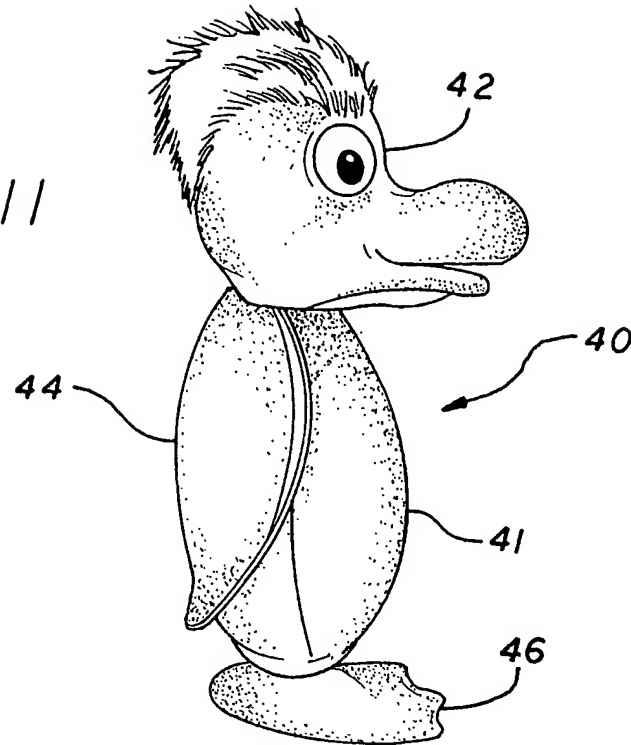
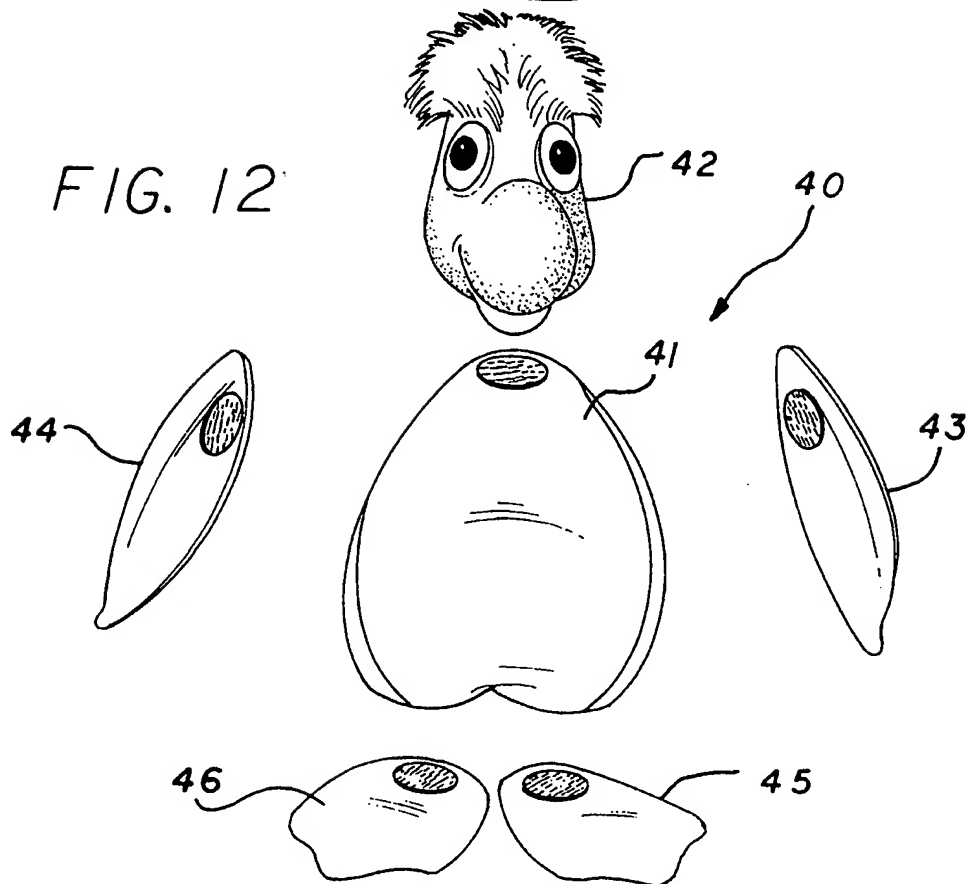


FIG. 12



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FIG. 13

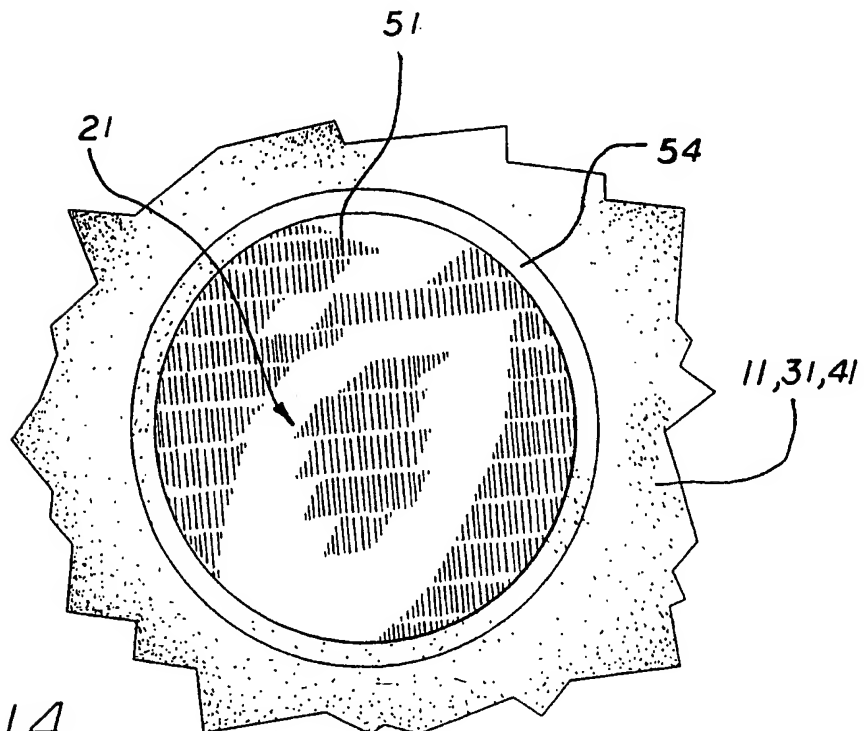
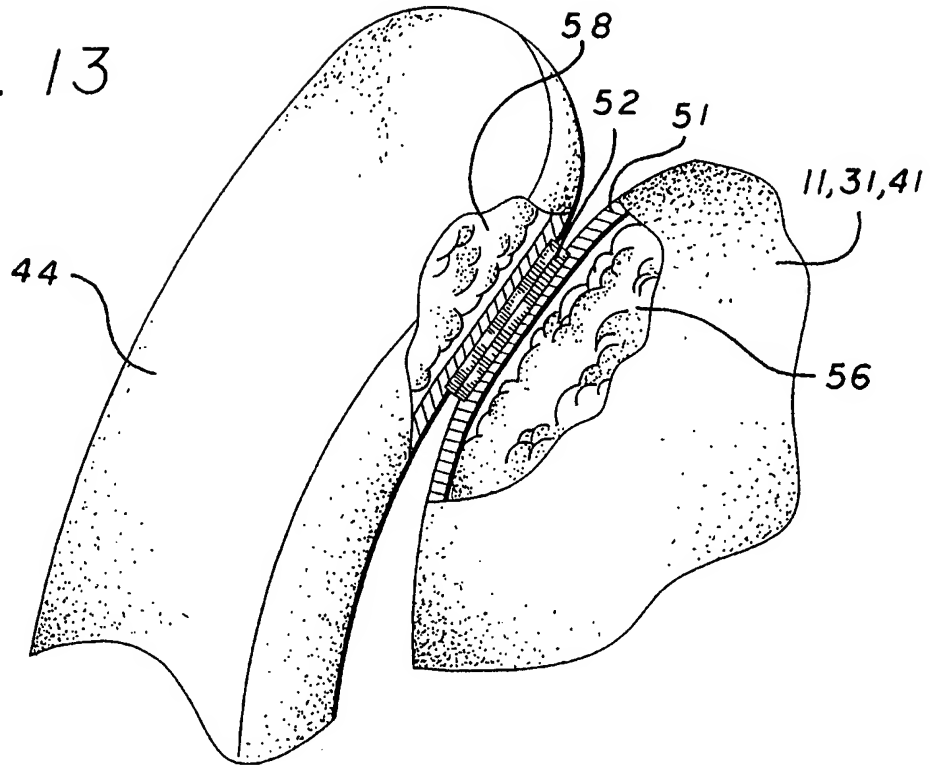


FIG. 14

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FIG. 15

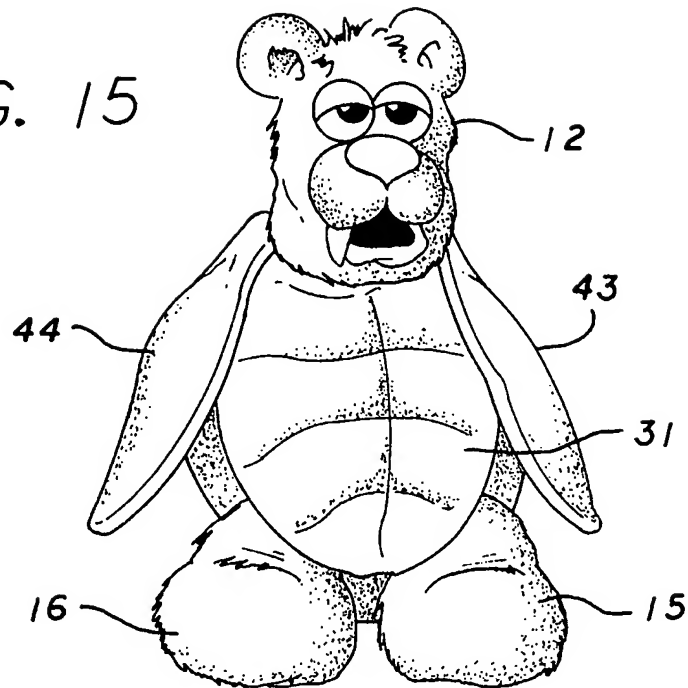


FIG. 16

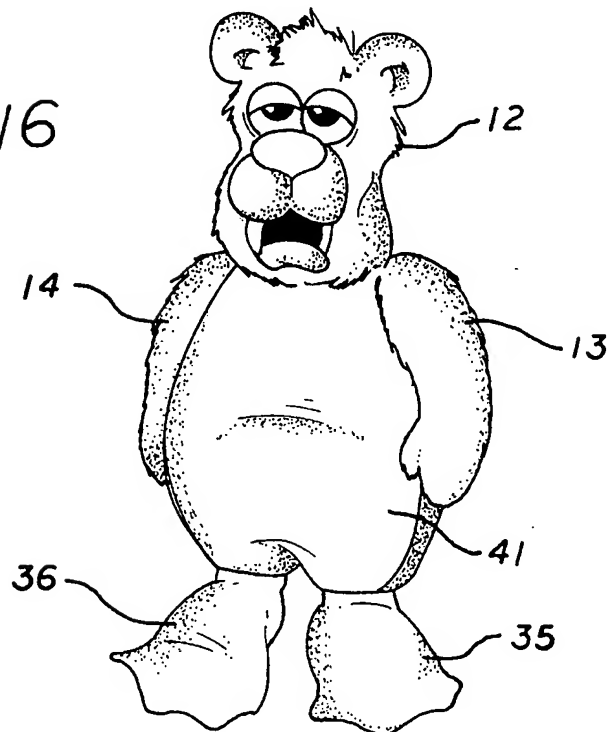


FIG. 17

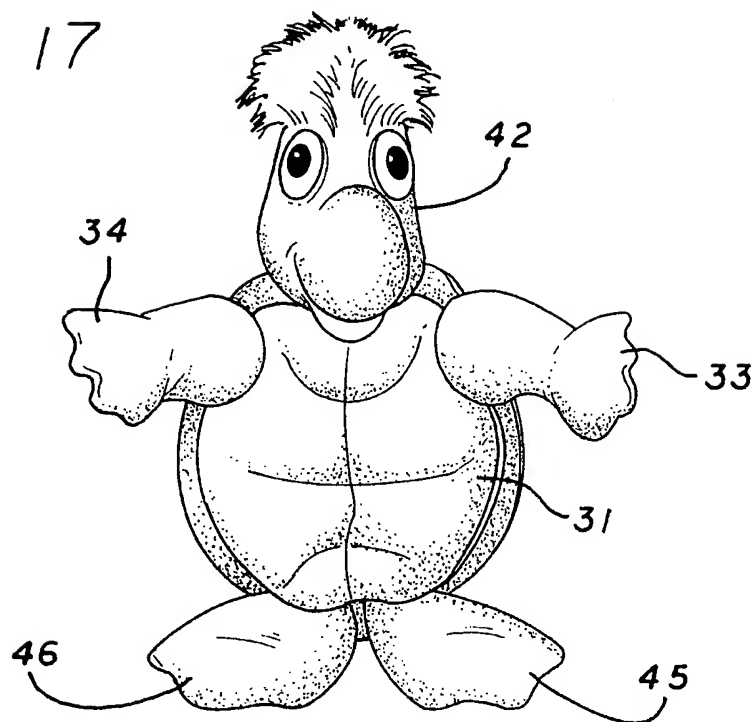
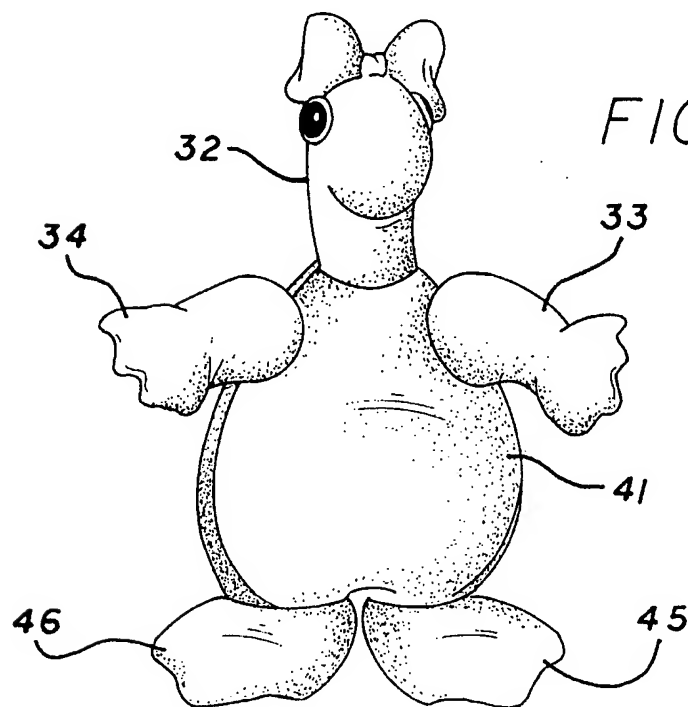


FIG. 18



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FIG. 19

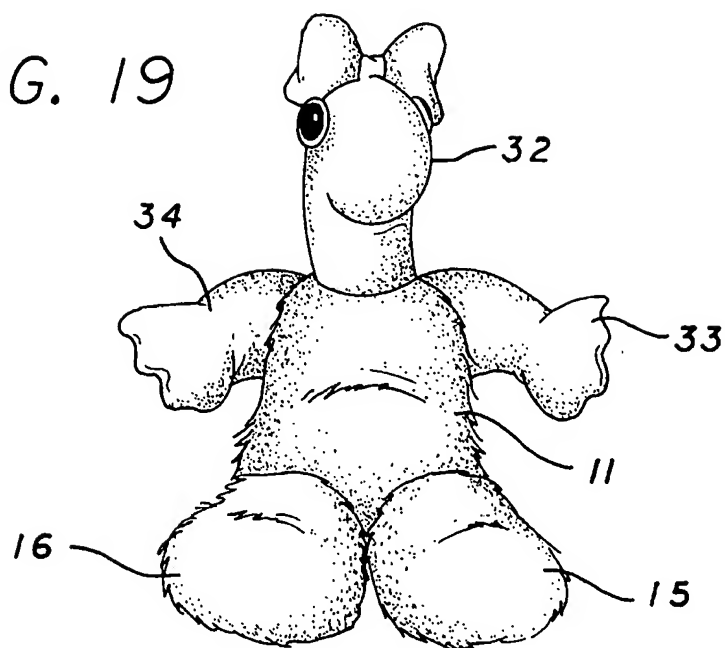
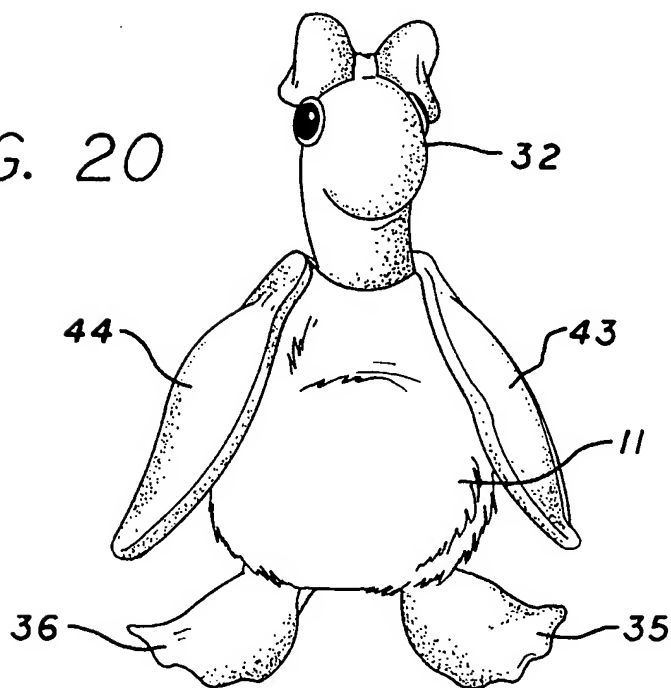


FIG. 20



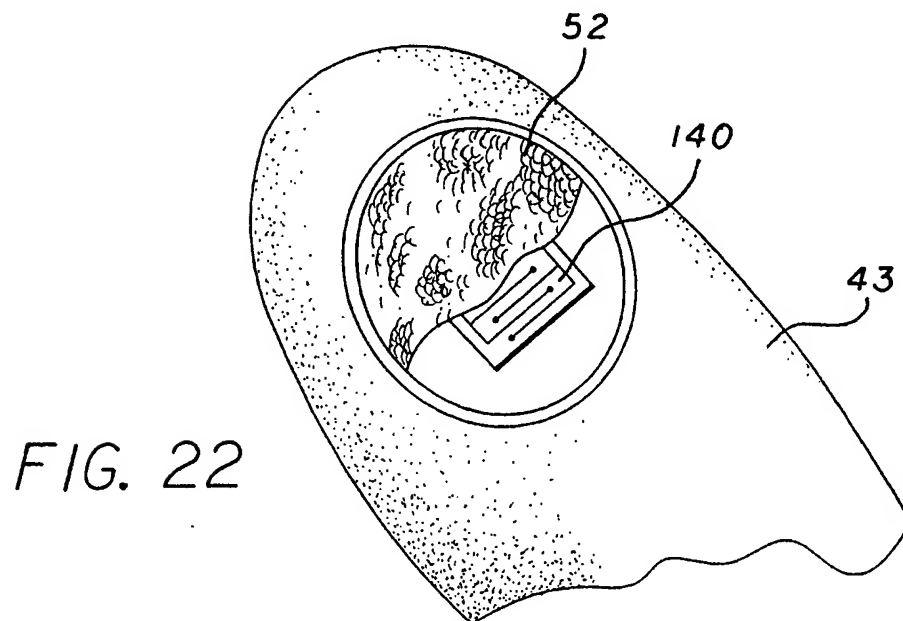
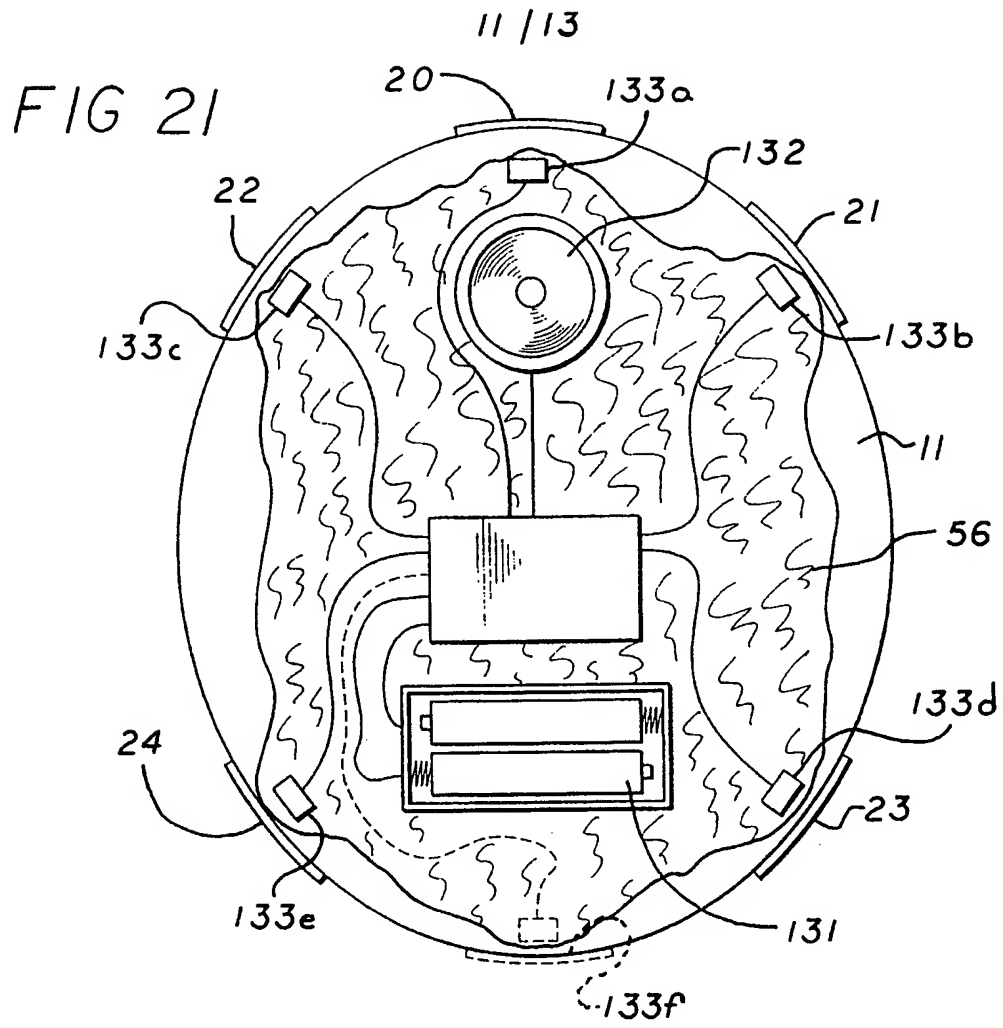
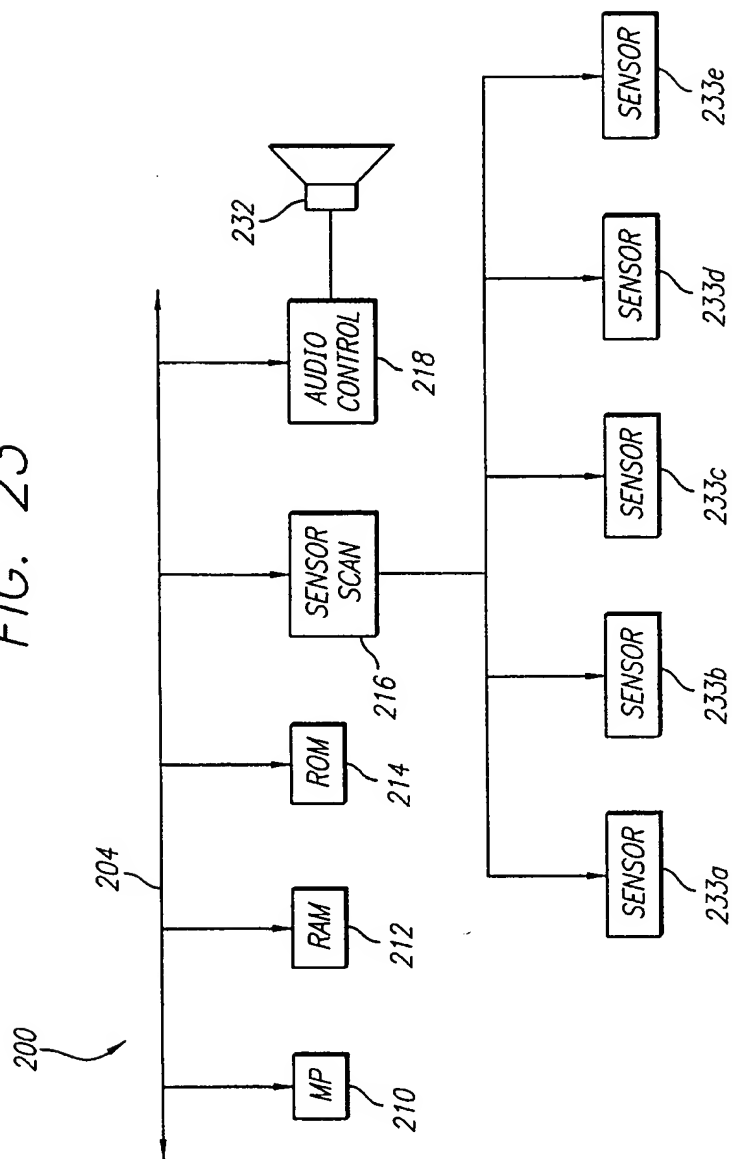
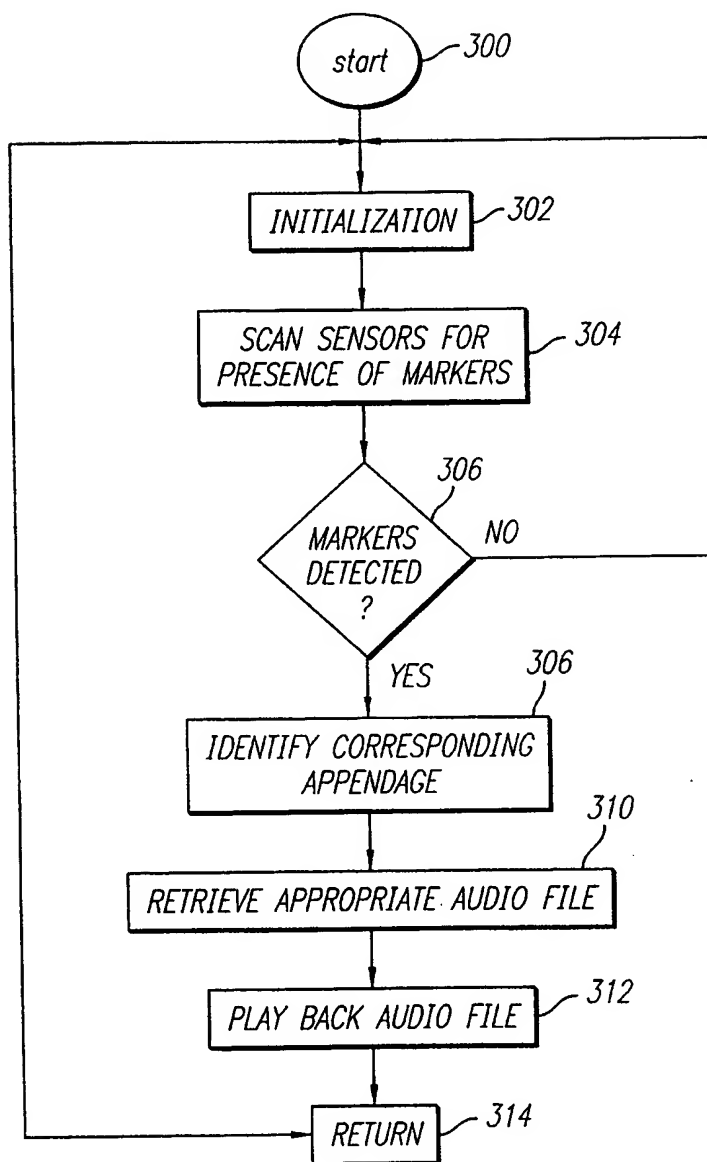


FIG. 23



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FIG. 24



INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 99/24360

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A63H3/02 A63H3/16 A63H3/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A63H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	EP 0 835 677 A (GEN CREATION INTERNATIONAL LIM) 15 April 1998 (1998-04-15) column 2, line 25 -column 3, line 50; figures 1,5 ---	1-5,7, 12-16,18 8,19
X	US 4 869 701 A (KAWAI HIROYUKI ET AL) 26 September 1989 (1989-09-26) column 2, line 4 -column 7, line 35; figures 1-3 -----	1,2,4,5, 8-10,12, 13,15, 16,19-21

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Date of the actual completion of the international search

11 January 2000

Date of mailing of the international search report

27/01/2000

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Feber, L

INTERNATIONAL SEARCH REPORT

Information on patent family members

Interr. Application No

PCT/US 99/24360

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0835677 A	15-04-1998	US 5788554 A	04-08-1998
US 4869701 A	26-09-1989	JP 63161987 A	05-07-1988
		KR 9700432 B	11-01-1997

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